

hardly be any doubt that the supplies, due to the various reasons cited above, have decreased very materially and result has been the increase in the price of fish in the Calcutta markets and perhaps in other larger mofussil towns also.

Whatever steps it may be possible for the Government to take to increase the fish supply to the Calcutta markets, the fact will remain that the supply, which has never been adequate even in the past, will remain insufficient so long as the present emergency conditions last. The need of the moment is, therefore, that we must definitely concentrate on increasing the local production of fish by stocking all pieces of water and of conserving our existing supplies in such a way as to get the maximum benefit out of them.

I, DEODAR STREET, BALLYGUNGE.

CALCUTTA,

16th December, 1942.

S. L. HORA,

Director of Fisheries,

Bengal.

XVII.—NOTE ON *CURETIS* SPECIES AT KALLAR.

Kallar is at the foot of the Mettupalaiyam Ghat below Coonoor. Its altitude is 1,250 ft. and it is locally abounding in butterflies.

1. *Curetis thetis*, Drury.

This was the only species observed by Hampson in the Nilgiris. He notes, '1,000 ft. to 3,000 ft. S. and W. slopes of the Nilgiris. Very rare. Outer margin of the H. W. much rounded. Both orange and white females are found (?) 'The question mark is mine.

C. thetis is rare at Kallar but I have seen or caught it on the following dates:—♂ 28/3, ♀ 31/7, ♀ 14/8, ♀ 22/9. The female is a jungle insect, a characteristic shared to some extent by the females of the other two species. The male does not seem to be attracted much by moisture, and the female will usually be caught settling on the underside of leaves.

2. *Curetis bulis*, Db. and Hew.

3. *Curetis acuta dentata*, Moore.

C. acuta is rare but I have records of it on the following dates:—♂ 31/1, ♂ 28/3, ♂ 16/7, ♀ 7/12, ♂ May, ♀ 20/9 (Ootacamund). All the males were caught settling on damp sand, but the females do not seem to be attracted by moisture.

I also have one definite specimen of *bulis* ♂ taken on 6/12, and another doubtful specimen ♂ caught on 10/5. These also were taken on damp sand. I have no information that *bulis* has been recorded as a South Indian species before, and Evans gives its range as Mussootie—S. Burma. I have come across no females, but the females of both these species seem to be very scarce.

The following are comparative measurements :—

KALLAR	Other specimens in my collection. (Burma, Assam, E. & W. Himalayas.)	Evans measurements.
<i>acuta</i> ♂♂ 43-44 mm.	♂♂ 46.6 mm. (average.)	40-50 mm. for both sexes.
<i>bulis</i> ♂♂ 45 and 44 mm.	♂♂ 46 mm. (average.)	¹ 55-45 mm. for both sexes
<i>acuta</i> ♀ 50 mm. (Ootacamund.)	♀♀ 50 mm. (average.)

In *acuta* all the Kallar specimens are small and the HW is much more rounded and the FW less pointed than is the case with other specimens in my collection. They are very constant in shape and size and would seem to warrant subspecific rank. My two (?) specimens of *bulis* exhibit the same characteristics.

Evans states that in *bulis* the upper portion of the discal band in 6 and 7 on the UNH is not in line with the bar at the end of the cell: in *acuta* it is in line. My experience is that this is not strictly the case, as, in the majority of my specimens of *acuta* it is slightly out of alignment with the discal band though occasionally it is in direct alignment. In my first specimen of *bulis* the bar and the band are more out of alignment than is the case in any other of my specimens. In the second specimen it is sufficiently out of line for me to identify it as *bulis*, but the upperside is that of *acuta*, whereas in the first specimen the upperside markings are typical of *bulis*. The second specimen has a great deal of orange on the HW and the tooth on the forewing is definite. This, however, may be due to its being a DS butterfly whereas the other one is a WS specimen.

The only local specimen of ♀ *acuta* in my possession is one from the collection of the late O. C. Ollenbach, Esq., and is rather vaguely marked 'Ootacamund'. As this is large and much more of the shape and size of my northern specimens I suspect that it comes from the drier northern slopes of the Nilgiris. It would surprise me to meet with any *Curetis* at the altitude of Ootacamund town.

To conclude, I have had no experience of *Curetis* from elsewhere in Southern India and the particular characteristics I have mentioned may be peculiar to most specimens from the south. Nevertheless, it seems to me that a subspecies is indicated, whether for this locality or for a larger area.

KETTI, NILGIRIS,
5th Oct. 1942.

M. A. WYNTER-BLYTH.

XVIII. ADDITIONS TO THE LIST OF SIMLA BUTTERFLIES PUBLISHED IN VOL. XLI, NO. 4.

1. *Papilio machaon asiatica*, v. *ladakensis*, Moore. Poo, July, 1941. (Inner hills.)
2. *Ismene aedipodea aegina*, Plotz. Simla, Spring, 1942. Hitherto not recorded west of Mussoorie.

¹ Evans measurements seem to me to be on the small side.